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## Claims

- 1.[CURRENTLY AMENDED] . A method for business decision support using a web server and client user interfaces for performance evaluation of human resources comprising professional ability and trust, utilizing an information network with a plurality of members wherein said members comprise a First Member and a Second Member with a Professional Collaboration Network with at least one Professional layer and at least one Trust Layer, comprising:
- -obtaining member information;
- -establishing a Professional layer based on the member information comprising disclosed professional ability and pairwise professional relationships with other members of the Professional Layer;
- -establishing a Trust Layer by utilizing a linkage search engine to identify linkages from member information comprising pairwise trust relationships with other members of the Trust layer from disclosed interactions between pairs of members resulting from prior or current personal contact;
- iteratively using such linkages between members, to create a chain of trust linkages that generate at least one connected network of members as a subset of the Trust Layer with each of said connected networks comprising members connected to every other member in said connected network through a series of pairwise connections between members, wherein each of said connected networks comprise one or more connection threads each of which is a unique path along said pair-wise linkages between any two of said members with any one pair-wise linkage traversed only once;
- -identifying a Trust Reference for members of said Trust layer utilizing the chain of trust relationships along one or more connection threads;
- -accessing from the web server a Professional Reputation for at least one member, from the at least one Professional Layer with members wherein the professional ability of said members are assessed using third party knowledge of said members;
- -accessing from the web server a Trust Reference for at least one member from the at least one. Trust Layer using the trust relationships along one or more connection threads; and
- -evaluating for a First Member, the Professional Reputation and Trust Reference of a Second Member.
- 2. .[ CURRENTLY AMENDED] A method for business decision support as in claim 1, wherein said accessing the Trust Reference from the at least one Trust Layer further comprising:

- -querying the at least one connected network of the at least one Trust Layer of the Professional Collaboration Network comprising trust linkages representing trust measures, of members of the at least one Professional Collaboration Network for the Second Member;
- -obtaining in response from the at least one Trust Layer, communications from a set of members –first level Trust Members that provide a Trust Reference of the Second Member, wherein each First Level Trust Member has a pairwise relationship to the Second Member in one of said connection threads;
- -querying at least one Trust Layer of the Professional Collaboration Network comprising trust linkages representing trust measures members of the at least one Professional Collaboration Network for each of said First Level Trust Members;
- -obtaining in response from the at least one Trust Layer of the Professional Collaboration Network, communications from a set of members –Second Level Trust Members that provide a Trust Reference of each of the First level Trust Members;
- -iteratively as in the last two steps obtaining a chain of trust linkages with communications between corresponding n <sup>th</sup> and (n+1) <sup>th</sup> level Trust Members to provide a Trust Reference of the nth level Trust Member by the (n+1)<sup>th</sup> level Trust Member thereby building a connection thread;
- -terminating the backward chaining iterations of the last step when a predetermined number –M- of Trust Members of level (n+1) or less are determined to be the First Member, thereby generating M complete connection threads;
- -computing one or more aggregate trust measures with forward chaining from at least one of the resulting M or less, iterative Trust References available to the First Member.
- 3. [CURRENTLY AMENDED] A method for business decision support as in claim 1, wherein said accessing the professional ability of the Second Member from the Professional Layer comprises:
  - .creating a forum for interaction of the members and generating ,threads for each discussion topic;
  - .visually representing on user screens components of professional fields of members along multiple axes with an origin representing multiple field types, , wherein the distance from the origin represents the level of competence;

- .visually representing on user screens each posting of each member on said forum with components of professional field content in the posting along multiple axes representing multiple field types, about an origin, wherein the distance from the origin represents the proportion of content in each relevant field;
- . visually representing on user screens each response to a posting or another response of each member on said forum with components of professional field content in the posting along multiple axes representing multiple field types, about an origin, wherein the distance from the origin represents the proportion of content in each relevant field;
- .thereby creating a tree defined by a sequence of responses each characterized by measures of multiple field strength components each representing a branch of the tree;
- .accumulating the contributions of each member;
- . representing on an attribute space for the set of all postings of the Second Member in the network ;
- . selecting a point or a region of the space to investigate the competence of the Second Member;

thereby using the accumulated contributions of members to assess professional competence in any of the fields represented as dimensions.

- 4. .[ CURRENTLY AMENDED] A method for business decision support as in claim 3, wherein the termination of any branch of the tree on any thread provides information on the professional competence of the last contributor to the thread.
- 5. .[ CURRENTLY AMENDED] A method for business decision support as in claim 1, wherein said First member is a member of a different Trust Layer of the at least one Trust Layer, to the Second Member.
- 6. .[ CURRENTLY AMENDED] A method for business decision support f as in claim 2, wherein Trust Reference Guarantees are provided for members of the Trust Layer

wherein the (n+1)th level Trust Member offers a (n+1)th level Trust Reference Guarantee with a (n+1)Trust Payout and a (n+1)Trust Premium for the integrity of an n<sup>th</sup> level Trust Member and the n<sup>th</sup> level Trust Member offers a nth level Trust Reference Guarantee with a nth Trust Payout and a nth Trust Premium for the integrity of an (n-1)<sup>th</sup> level Trust Member wherein iteratively, the value of "n" changes along said connection thread to "0" as defined by the said Second Member along a Backward Chained complete connection thread and wherein the set of Reference guarantees from the (n+1)th level Trust Member to said Second Member creates a Forward Chain of Trust Reference Guarantees that support the reputation of the Second Member relative to the (n+1)th Trust Member with all of the Trust Payouts in the event of failure of the chain of reputations from the (n+1)th level Trust Member to the Second Member with a guaranteed connection thread.

- 7. .[ CURRENTLY AMENDED] A method for business decision support f as in claim 6, wherein said (n+1)th Trust Member is the First Member and the aggregate of said chain of Trust Premia for Trust Reference Guarantees are an Aggregate Trust Guarantee Premium paid by the First Member.
- 8. .[ CURRENTLY AMENDED] A method for business decision support as in claim 7, wherein the Trust Payouts of the guarantees is paid by each of said Guarantors through the Professional Collaboration Network, if the related Trust Reference proves not to predict outcome.
- 9. [CURRENTLY AMENDED]A method for business decision support as in claim 7, wherein a financial institution underwrites one or more of said Trust Reference Guarantees.
- 10. [CURRENTLY AMENDED] A method for business decision support as in claim 1, further comprising a bidding system wherein said First Member may publish specifications for participation of one or more of said members and invite bids for participation and thereafter utilize the Trust Layer and the Professional Layer to evaluate prospects in the context of bids received.
- 11. [CANCELLED]
- 12. .[ CANCELLED]
- 13. [NEW] A method for business decision support as in claim 2, wherein said Trust Reference comprises one of a positive or negative reference.
- 14. [NEW] A method for business decision support as in claim 1, wherein evaluating a Professional Reputation for at least one member, from the at least one Professional

Layer with members wherein the professional ability of said members are assessed using third party knowledge of said members, comprises:

- -establishing, a Professional Layer based on member information comprising pairwise professional relationships with other members of the Professional Layer from disclosed prior interactions between pairs of members, resulting in linkages generated by such interactions, thereby generating at least one connected network of members as a subset of the Professional Layer with each of said connected networks comprising members connected to every other member in said connected network through a series of pairwise connections between members, wherein each of said connected networks comprise one or more connection threads each of which is a unique path along said pair-wise linkages between any two of said members with any one pair-wise linkage traversed only once;
- -establishing a Professional Reference for members of said Professional layer utilizing the chain of professional relationships along one or more connection threads.
- 15. [NEW]. A method for business decision support as in claim 14, wherein said evaluating the Professional Reference from the at least one the Professional Layer further comprising:
  - -querying the at least one connected network of the at least one the Professional Layer of the Professional Collaboration Network comprising professional linkages representing professional measures, of members of the at least one Professional Collaboration Network for the Second Member;
  - -obtaining in response from the at least one the Professional Layer, communications from a set of members –first level the Professional Members that provides a the Professional Reference of the Second Member, wherein each First Level the Professional Member has a pairwise relationship to the Second Member in one of said connection threads;
  - -querying at least one the Professional Layer of the Professional Collaboration Network comprising professional linkages representing professional measures members of the at least one Professional Collaboration Network for each of said First Level the Professional Members;
  - -obtaining in response from the at least one the Professional Layer of the Professional Collaboration Network, communications from a set of members Second Level the Professional Members that provides a the Professional Reference of each of the First level the Professional Members;
  - -iteratively as in the last two steps obtaining a chain of professional linkages with communications between corresponding m <sup>th</sup> and (m+1) <sup>th</sup> level the Professional Members to provide a the Professional Reference of the nth level the

Professional Member by the (m+1)<sup>th</sup> level the Professional Member thereby building a connection thread;

-terminating the Backward Chaining iterations of the last step when a predetermined number –P- of the Professional Members of level (m+1) or less are determined to be the First Member, thereby generating M complete connection threads;

-computing with Forward Chaining, one or more aggregate professional measures from at least one of the at resulting M or less, iterative the Professional References available to the First Member.

16. [NEW]A method for business decision support as in claim 15, wherein Professional Reputation Guarantees are provided for members of the Professional Layer wherein the (m+1)th level Professional Member offers a (m+1)th level Professional Reputation Guarantee with a (m+1) Professional Payout and a (m+1) Professional Premium for the professional reputation of an m<sup>th</sup> level Professional Member and the m<sup>th</sup> level Professional Member offers a mth level Professional Reputation Guarantee with a mth Professional Payout and a mth Professional Premium for the professional reputation of an (m-1)th level Professional Member, and wherein iteratively, the value of "m" changes along said connection thread to "0" as defined by the said Second Member along a Backward Chained complete connection thread and wherein said professional reputation guarantees from the (m+1)th level Professional Member to the said Second Member creates a Forward Chain of Professional Reputation Guarantees that support the professional reputation of the Second Member relative to the (m+1)th Professional Member with all of the Payouts in the event of failure of the chain of professional reputations from the (m+1)th level Professional Member to the Second Member with a guaranteed connection thread.

- 17. [NEW] A method for business decision support as in claim 16, wherein said (m+1)th Professional Member is the First Member and the aggregate of said chain of Professional Premia for Professional Reputation Guarantees are a Aggregate Professional Guarantee Premium paid by the First Member.
- 18. [NEW] A method for business decision support as in claim 17, wherein the Professional Payouts of the guarantees is paid by each of said Guarantors through the Professional Collaboration Network, if the related Professional Reference proves not to predict outcome.
- 19.[NEW] A method for business decision support using a web server and client user interfaces for performance evaluation of human resources comprising professional ability and trust, utilizing an information network with a plurality of members wherein

said members comprise a First Member and a Second Member – with a Professional Collaboration Network (PCN), comprising:

- -obtaining of member information;
- -establishing member information comprising both of pairwise professional ability and trust relationships with other members of the PCN by utilizing a linkage search engine to identify linkages from member information comprising pairwise trust and professional relationships with other members from disclosed prior interactions between pairs of members,
- iteratively using such linkages between pairs of members, to create a chain of linkages that generate at least one connected network of members as a subset of the PCN with each of said connected networks comprising members connected to every other member in said connected network through a series of pairwise connections between members,

wherein each of said connected networks comprise one or more connection threads each of which is a unique path along said pair-wise linkages between any two of said members with any one pair-wise linkage traversed only once;

- -establishing both of a Professional Trust Reference and a Professional Reputation for members of said PCN utilizing the chain of professional and trust relationships along one or more connection threads;
- -querying the at least one connected network of the Professional Collaboration Network comprising professional linkages representing professional ability, and trust linkages representing trust measures, of members of the at least one Professional Collaboration Network for the Second Member;
- -obtaining in response from the PCN, communications from a set of members —first level Referee Members that provides a Trust Reference and a Professional Reputation of the Second Member, wherein each First Level Referee Member has a pairwise relationship to the Second Member in one of said connection threads;
- -querying of the Professional Collaboration Network comprising professional linkages representing professional ability, and trust linkages representing trust measures, members of the at least one Professional Collaboration Network for each of said First Level Referee Members;
- -obtaining in response from the Professional Collaboration Network, communications from a set of members –Second Level Referee Members that provides a Trust Reference and a Professional Reputation of each of the First level Referee Members;
- -iteratively as in the last two steps obtaining a chain of trust linkages and professional linkages with communications between corresponding  $p^{th}$  and  $(p+1)^{th}$  level Referee

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Members to provide a Trust Reference and a Professional Reputation of the nth level Referee Members by the  $(p+1)^{th}$  level Referee Members thereby building a connection thread:

- -terminating the Backward Chaining iterations of the last step when a predetermined number –R- of Referee Members of level (p+1) or less are determined to be the First Member, thereby generating M complete connection threads;
- -computing one or more aggregate trust and professional measures with forward chaining from at least one of the resulting R or less, iterative Trust References and Professional Reputations available to the First Member.
- -thereby enabling the decision support system to evaluate for a First Member, the Professional Reputation and Trust Reference of a Second Member.
- 20. [NEW] A method for business decision support as in claim 19, wherein Guarantees are provided for members of the PCN wherein the (p+1)th level Referee Member offers a (p+1)th level Guarantee with a (p+1) Payout and a (p+1) Premium for the integrity and professional competence of a p<sup>th</sup> level Trust Member contingent on the p<sup>th</sup> level Referee Member offering a pth level Guarantee with a pth payout and a pth premium for the integrity of a (p-1)<sup>th</sup> level Referee Member wherein thereby iteratively, the value of "p" changes along said connection thread to "0" as defined by the said Second Member along a Backward Chained complete connection thread and wherein said Guarantees from the (p+1)th level Referee Member to the said Second Member creates a Forward Chain of Guarantees that support the integrity and professional competence of the Second Member relative to the (p+1)th Referee Member with all of the Referee Member in the event of failure of the chain of reputations from the (p+1)th level Referee Member to the Second Member, and wherein the (p+1)th Referee Member is the First Member and the aggregate of said chain of Premia for Guarantees are a Aggregate Guarantee Premium paid by the First Member.
- 21. [NEW] A method for business decision support as in claim 15, wherein said Professional layer comprises experts who can evaluate a member and are members of the at least one Professional Layer and therefore may have connection threads to the First Member and thereby enable a Professional Reference by the Professional Collaboration Network.
- 22. [NEW] A method for business decision support as in claim 1, wherein the First member is an investor and the Second Member is member requesting venture funding.